REALIZING JOINT MISSION FORCE C4ISR CAPABILITIES

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Introduction

The U.S. Army Pacific (USARPAC) is the force provider of critical Army capabilities in support of the U.S. Pacific Command's (USPACOM) Joint Mission Force (JMF) Concept. In 2000, the Commander, USPACOM originally defined the JMF Concept as: "… a suitably sized force package, drawn from designated PACOM Component Ready Forces, augmented by capabilities provided by Supporting Combatant Commanders, Coalition Partners, and a coordinated group of interagency, nongovernment, and private organizations, from which a Joint Task Force Commander can build tailored task forces for the accomplishment of a wide range of missions."

The USPACOM Combatant Commander believes that 90 percent of his "core" JMF missions will be in the small-scale contingency end of the spectrum and, unless component capabilities are compatible with the JMF Concept, they will become irrelevant and will not be able to participate in contingency missions.

Defining Operational Needs

In September 2001, USARPAC submitted an immediate Operational Needs Statement (ONS) for critical command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) capabilities to become compatible with the JMF Concept. This ONS defined C4ISR connectivity and interoperability with USPACOM, reachback to USARPAC, and both vertical and horizontal support to the operational forces. USARPAC has neither a corps nor a theater signal brigade to support these requirements. In the past, when an Army force (ARFOR) was activated to support a USPACOM operational mission, USARPAC went to the U.S. Army Forces Command for support, a process that takes 7-10 days. However, USPACOM levied the requirement that a Joint Task Force (JTF) and its Service components be operationally ready within 2 days of notification. These joint operational requirements mandated that USARPAC have its own organic C4ISR capability.

Teaming

To support USPACOM's requirement, the Army staff and Army Acquisition Corps quickly teamed to field a deployable C4ISR package to USARPAC within 12-13 months. This deployable C4ISR package consists of five separate systems that are integrated to perform C4ISR capabilities in support of JMF missions. It consists of the following subsystems: the Base Band Node (BBN), the USARPAC Tri-band Satellite Terminal (U-TST), the Battlefield Video

The deployable C4I Package includes the BBN (left vehicle) supported by a Tri-band Tactical Satellite Terminal (right vehicle).

Teleconferencing Equipment (BVTC), the Global Command and Control Subsystem-Army (GCCS-A), and the TROJAN Lightweight Terminal Equipment (LITE) (V)1 system.

The Program Executive Office for Command, Control, and Communications–Tactical (PEO, C3T), Fort Monmouth, NJ, has direct project management responsibilities for the BBN, U-TST, BVTC, and GCCS-A subsystems; and the Army Communications-Electronics Command (CECOM) has responsibility for managing the TROJAN LITE (V)1 system.

The deployable C4ISR package augments the Pacific-wide communications infrastructure and is deployed through coordination with USPACOM and USARPAC major subordinate commands. This robust, high-bandwidth infrastructure provides multiple security level connectivity (e.g., Non-classified Internet Protocol Router Network (NIPRNET), Secret Internet Protocol Router Network (SIPRNET), and Top Secret/Sensitive Compartmented Information Joint Worldwide Intelligence Communications System (JWICS)), allowing for the secure use of existing and future command and control applications (e.g., GCCS-A). This enhanced capability also allows a similarly enabled and deployed ARFOR reachback processing and intelligence capability, reducing its footprint and supportability tail. The intent is to provide the designated ARFOR with a capable theater infrastructure, both while in garrison and deployed. Each of the networks (SIPRNET, NIPRNET, and JWICS) support VTC, data, and voice formats. Inherent is the ability to be upgraded in the out years as the Army fields Objective Force C4ISR capabilities.

This advanced C4ISR package allows USARPAC to rapidly deploy two communications suites (by military or commercial means) for support of split operations (e.g., ARFOR and Initial Staging Base). These high-bandwidth deployable packages are also capable of linking with a supported JTF (at sea), as well as to any communications infrastructure available in the USPACOM area of responsibility. The commercial-based communications subsystems are compatible with, and are on a glidepath to, future Army communications systems (e.g., Warfighter Information Network-Tactical (WIN-T)). Additionally, the packages are supportable by approved Program of Record and are capable of scaling up to support a Joint Force Land Component Commander in a major theater of war, if required.

The BBN (interior view) provides advanced commercial off-the-shelf telecommunications technologies for the warfighter.

Conclusion

PEO, C3T assigned Project Manager, WIN-T as the overall system-of-systems integrator for all five C4ISR subsystems. Support for the materiel developers includes the Product Manager, GCCS-A and the Intelligence and Information Warfare Directorate at CECOM.

The basic USARPAC C4ISR package was successfully delivered to Fort Shafter, HI, before the required delivery date of Oct. 1, 2002, and C4ISR teams are now training with the package and conducting acceptance testing.

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